



CAI  
IST5  
-1996  
P46

3 1761 11765362 6

## SECTOR COMPETITIVENESS FRAMEWORKS

## PLASTIC PRODUCTS HIGHLIGHTS



**Industry  
Sector**  
Advanced Materials  
and Plastics

**Secteur  
de l'industrie**  
Matiériaux de pointe et  
produits en matière plastique

Canada

**Sector Competitiveness Frameworks** are a new series of documents produced by Industry Canada in partnership with Canada's key industry stakeholders. Each framework will examine a major Canadian industry sector, and will be prepared in two volumes. *Part 1 — Overview and Prospects* focusses on the opportunities, both domestic and international, as well as on the challenges facing industry sectors in Canada. *Part 2 — Framework for Action* will be based on consultations with major industry stakeholders, following study and review of the *Overview and Prospects*.

The objective of the **Sector Competitiveness Frameworks** series is to seek ways in which government and private industry together can strengthen Canada's competitiveness and, in doing so, generate jobs and growth.

In all, some 29 industrial sectors will be analyzed. *Part 1 — Overview and Prospects* will be available for distribution in printed as well as electronic forms during coming months for the following industries:

Aircraft and Aircraft Parts

Automotive Industry

Bus Manufacturing

Consulting Engineering

Forest Products

Household Furniture

Petroleum Products

Plastic Products

Primary Steel

Rail and Guided Urban Transit Equipment

To order any document in the **Sector Competitiveness Frameworks** series, please send your request to us by Fax at (613) 941-0390 or by E-mail at [order.commande@ic.gc.ca](mailto:order.commande@ic.gc.ca)

To obtain additional information about the **Sector Competitiveness Frameworks**,  
please phone us at 1-800-390-2555

Electronic copies of *Plastic Products: Part 1 — Overview and Prospects* are available on the Internet  
at the following address: [http://strategis.ic.gc.ca/plastic\\_products.scf](http://strategis.ic.gc.ca/plastic_products.scf)

This Highlights document can be made available in alternative formats upon request.

© Minister of Supply and Services Canada 1996

Cat. No. C21-22/6-1-1996-1E

ISBN 0-662-24745-0

*Aussi disponible en français sous le titre : Points saillants sur les produits en matière plastique.*



## HIGHLIGHTS

**The plastic products industry is a high-growth industry, with an average annual growth rate nearly double that of all manufacturing.**

- Using a variety of fabricating methods, the industry transforms synthetic resins into a wide range of finished plastic products and semi-finished parts for other manufactured goods.
- Shipments: \$9.5 billion in 1995.
- Jobs: 67 200 in 1995.
- About 80 percent of total plastic products output goes to three main end-use markets: packaging, construction and automotive parts.
- Beyond these figures, plastics processing occurs as a secondary activity by firms in other industries, and by others who produce plastic products for internal consumption. When these are added, total plastics processing activity accounts for:
  - shipments: \$17 billion in 1995.
  - jobs: 103 700 in 1995.

■ The industry has strong links to other industries: synthetic resins, machinery and mould manufacturing, and a wide range of downstream customer industries.

- The plastic products industry is relatively labour intensive. It is not heavily unionized and needs skills upgrading. Average wages are about 30 percent lower than in all manufacturing.
- The industry entered a high-growth phase in the 1960s and continues to grow in the 1990s. Growth stalled during the mid-1970s oil crisis and the 1981–82 and 1990–92 recessions.

**The industry is less innovative relative to all manufacturing, especially when it comes to research and development (R&D).**

- New technology tends to originate with resin and machinery suppliers.
- Domestic resin producers supply raw materials directly and they also create an infrastructure supporting the larger firms in the processing industry.

***The plastic products industry is composed mainly of small and medium-sized businesses.***

- Medium-sized establishments — with 50–99 employees and shipments worth \$5–15 million — have performed strongly. Their increasing share of industry output over the past decade is superimposed on high overall growth within the industry.
- Annual sales of most firms: less than \$5 million. Annual sales for over half of these: less than \$2 million.
- Production in Canada is less concentrated among the dominant firms than in the U.S.

***Trade is strongly focussed on the United States, which in 1995 accounted for 91 percent of exports and 78 percent of imports.***

- Transportation costs limit exports to more distant markets.
- The Canada–U.S. Free Trade Agreement forced the industry to make a major adjustment: from serving local and regional markets in a tariff-protected environment to finding its place in the larger North American market.
- The Canadian industry's export orientation is stronger than that of counterparts in the U.S., allowing for diversification of the export base in cases where a comparative technological advantage exists.
- Canadian firms should exploit this export knowledge. They should seek joint venture, acquisition or alliance opportunities that would allow them to capture larger shares of both the U.S. and other foreign markets.

***Industry demand — both Canadian and worldwide — is growing faster than the economy as a whole, although not as rapidly as in former years.***

- The NAFTA is accelerating the North American rationalization of customer industries, prompting plastics processors to react to reflect that change or else risk losing the business.
- While certain segments of the processing industry — pipe, profile and film, for example — compete on a North American basis, the industry is still fragmented.

***The plastic products industry is experiencing an accelerated rate of technological change.***

- At the same time, rationalization is causing supplier industries to cut back on technical services.
- This affects the small and medium-sized firms that characterize the Canadian industry — the firms without the financial resources to make long-term investments such as R&D. As a result, few of these firms have established competitive advantage through product differentiation.

***The small and medium-sized businesses have trouble obtaining financing.***

- Industry consensus is that the banks do not understand the industry or its companies. The industry is addressing this issue through its association, the Canadian Plastics Industry Association (CPIA).

***Upgrading skills in the work force and retaining skilled workers are outstanding industry issues.***

- An observed productivity gap between Canada and the U.S. directly affects human resources development: with new technology comes the need to upgrade work force skills to utilize this technology effectively.
- Knowledge levels within the industry are improving, but these — as well as the retention of skilled workers — remain major concerns.

***The industry faces numerous environment-related pressures that have the potential to restrict industry growth.***

- These include: solid waste management, challenges to the use of polyvinyl chloride (PVC) and possible links between plastics and endocrine disruptors.
- At the same time, using plastics in place of other materials very often makes a significant positive contribution to sustainable development.

***Industry Canada's Framework for Action for the plastic products industry will consider the industry's strengths as well as the challenges it faces.***

- Plastics is a high-growth industry. Its applications — both industrial and consumer — are broad and rapidly growing. However, the industry confronts numerous challenges.

These include:

- addressing the fact that the small size of many Canadian establishments impedes competitiveness
- accommodating the accelerating rate of technological change with the small number of firms doing in-house R&D

- encouraging firms to export and exploit their export knowledge
- upgrading skills to capitalize on technological advances
- facing environmental issues.

For further information concerning the subject matter contained in these Highlights, please contact:

Advanced Materials and Plastics Branch  
Industry Canada  
Attention: John Margeson  
235 Queen Street  
OTTAWA, Ontario  
K1A 0H5  
Tel.: (613) 954-3016  
Fax: (613) 952-4209  
E-mail: margeson.john@ic.gc.ca



